UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,923	11/27/2000	Terence Leong	P5635	4941

959	7590	10/12/2004

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EXAMINER
LUDWIG, MATTHEW J

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/722,923	LEONG ET AL.
	Examiner	Art Unit
	Matthew J. Ludwig	2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *27 November 2000.*

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-59* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-10,13-27,30-44 and 47-59* is/are rejected.

7) ☒ Claim(s) *11,12,28,29,45 and 46* is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date *9/30/04*.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1. ·   This action is responsive to communications: application filed 11/27/00.

2. ·   Claims 1-59 are pending in the case. Claims 1, 9, 18, 26, 35, 43, and 52, are independent

claims.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   **Claims 1-10, 13-27, 30-44, and 47-59, are rejected under 35 U.S.C. 103(a) as being**

unpatentable over G.M. Bierman 'Using XML as an Object Interchange Format',

University of Warwick, May 17, 2000.

 In reference to independent claim 1, Bierman teaches:

The paper discloses a means for utilizing XML as an object interchange format. We

define a new XML document type, OIFML, and show how it can be used to specify ODMG-

objects. Furthermore, the reference discloses when specifying an object, an arbitrary subset of

its attributes can be initialized explicitly (compare to "receiving at least one structured document

representing an instance of an object including attributes and attribute values defined for a

class"). See Bierman, pages 1-4. The reference provides the suggestion of utilizing an object

database and although the reference does not explicitly state the database is capable of storing

multiple structured documents representing multiple objects, however, the word *'capable of'*,

fails to proficiently describe weather or not the database is storing multiple structured documents

representing multiple object. Therefore, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to have modified the object database and provide

storage of multiple structured XML documents because the markup language is supported by a

large number of tools and it would have given the author the added benefit of utilizing XML in

the proficient interchange of object databases.

In reference to dependent claim 2, Bierman teaches:

The reference provides a standard for the persistence of object oriented programming

language objects in databases, which consists of an object model, object specification languages,

object query languages, and programming language bindings (currently for Java, C++, and

Smalltalk. See Bierman, page 1.

In reference to dependent claim 3, bierman teaches:

It is often the case that several objects are to be initialized with the same set of attributes

values. A tag shared_value_object is provided for this purpose. See Bierman, page 4.

In reference to dependent claim 4, Bierman teaches:

The paper discloses a means for utilizing XML as an object interchange format. We

define a new XML document type, OIFML, and show how it can be used to specify ODMG-

objects. Furthermore, the reference discloses when specifying an object, an arbitrary subset of

its attributes can be initialized explicitly. See Bierman, pages 1-4.

In reference to dependent claim 5, Bierman teaches:

The reference also allows for relationship with cardinality "many". Bierman uses the

same relationship tag as earlier, but provides a new tag links. See Bierman, page 11.

In reference to dependent claim 6 and 7, Bierman teaches:

The reference teaches the utilization of XML as a standard defining means for the interchange of object databases. See Bierman, page-12.

In reference to dependent claim 8, Bierman teaches:

The utilization of specific classes within the object-oriented database for use with XML structured documents. See Bierman, page 7.

In reference to dependent claim 9 and 10, Bierman teaches:

The utilization of specific classes within the object-oriented database for use with XML structured documents. The reference provides an instance of at least one object including attributes and attribute values defined for a class. See Bierman, page 7.

In reference to dependent claim 13, Bierman teaches:

The paper discloses a means for utilizing XML as an object interchange format. We define a new XML document type, OIFML, and show how it can be used to specify ODMG-objects. Furthermore, the reference discloses when specifying an object, an arbitrary subset of its attributes can be initialized explicitly. See Bierman, pages 1-4

In reference to dependent claim 14, Bierman teaches:

The reference also allows for relationship with cardinality "many". Bierman uses the same relationship tag as earlier, but provides a new tag links. See Bierman, page 11.

In reference to dependent claims 15 and 16, Bierman teaches:

The reference teaches the utilization of XML as a standard defining means for the interchange of object databases. See Bierman, page 12.

In reference to dependent claim 17, Bierman teaches:

The utilization of specific classes within the object-oriented database for use with XML structured documents. See Bierman, page 7.

In reference to claims 18-27, 30-34, the claims reflect the system comprising instructions used for performing the methods as claimed in claims 1-10, 13-17, respectively, and therefore are rejected under similar rationale.

In reference to claims 35-44, 47-51, the claims reflect the article of manufacture comprising instructions used for performing the methods as claimed in claims 1-10, 13-17, respectively, and therefore are rejected under similar rationale.

In reference to claims 52-59, the claims recite similar limitations to those of claims 1-8, and therefore are rejected under similar rationale.

Allowable Subject Matter

Claims 11, 12, 28, 29, 45, and 46, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

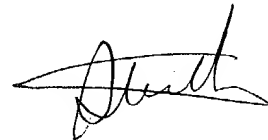|		
Sundaresan	USPN 6,569,207	filed (10/05/1998)
Fong et al.,	USPN 6,678,867	filed (07/06/2001)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 703-305-8043. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Hong can be reached on 703-308-5465. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML
September 30, 2004

STEPHEN S. HONG
PRIMARY EXAMINER